## ABSTRACT

In a switching power supply and a control method for the same in accordance with the present invention, a first error amplifier generates a first error signal by comparing the output signals of a plurality of converters with a reference voltage, an arithmetic unit generates a single output signal by adding the currents output from the rectifying means of the plurality of converters, a second error amplifier generates a second error signal by comparing the single output signal with the output of the first error amplifier, and PWM signal generators generate PWM signals on the basis of the output signal of the second error amplifier to PWM control each of a plurality of switching devices.